# U.S. ENVIRONMENTAL PROTECTION AGENCY

December 2001

# EPA Chooses Final Cleanup Plan for Groundwater at the NW Pipe and Casing Site.

On September 27, 2001, EPA selected a final plan to clean up contaminated groundwater at the Northwest Pipe and Casing Superfund site. In this fact sheet you will find a summary of the plan and comments received during the public comment period, as well as information on where you can find EPA's Record of Decision.

### Summary of the selected remedy

Air stripping wells will be installed in the ground to remove volatile organic chemicals (VOCs) from the most highly contaminated groundwater areas. The groundwater will be monitored to measure cleanup progress. Institutional controls, such as deed restrictions, will be used to limit public contact with site groundwater until cleanup goals are met. Erosion will be controlled during construction of the wells to minimize any effects on Dean Creek and Mount Scott Creek, which border the site.

# Why is this work necessary?

This cleanup will restore and maintain the upper aquifer as a potential source of drinking water and prevent the contaminated groundwater from moving off-site.

# **Facts about Air Stripping**

Air stripping is a process used to remove volatile organic chemicals from contaminated water. Volatile organic chemicals, or VOCs as they are called, tend to vaporize rapidly when exposed to air. A good example is nail polish remover.

When air stripping wells are used, air is injected into groundwater at the bottom of the well. As the air bubbles rise up through the well, the VOCs move from the water in which they are dissolved into the passing air stream, in the form of vapor. The contaminated vapors will be collected and treated with activated carbon to remove the VOCs. Carbon used in the process will be tested to determine if it is a hazardous waste that would require special handling.

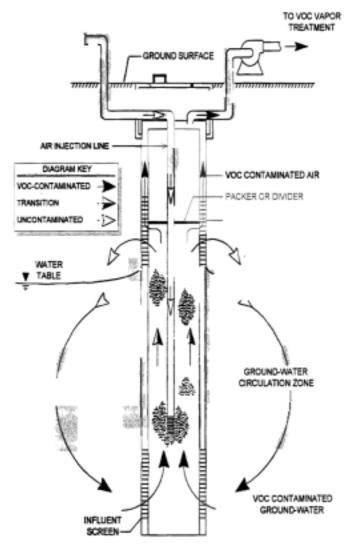


Figure 1: Schematic Drawing of the Air Stripping Process

### What happens next?

EPA expects to start designing the air stripping wells in 2002, if funds become available. Construction of the groundwater treatment wells, estimated to cost \$1.6 million, could start in late 2002.

EPA will operate the air stripping wells for a minimum of five years. EPA expects that VOC concentrations in the most contaminated groundwater areas will decline by up to 75 percent. However, EPA may continue operating the treatment system if it determines that continued operation will shorten the cleanup time for the rest of the site.

## What were the other choices for cleanup?

A "no action" scenario was presented for a basis of comparison only. EPA developed other alternatives by combining the following technologies:

**Natural attenuation**: Natural processes, under favorable conditions, can change or destroy chemical substances. EPA would verify monitoring results to make sure that natural processes are working rather than relying totally on "engineered" processes.

Pump and Treat: Extraction wells remove contaminated groundwater from below ground. Water is pumped to an above-ground air stripper where VOC's are taken out. The treated water would be discharged into a drainage channel next to the site.

# Why did EPA choose in-ground air stripping?

This remedy will remove more of the contamination in the groundwater in less time than other alternatives at a reasonable cost.

### **Comments and concerns**

The public comment period on EPA's proposed groundwater cleanup plan ran from May 17 to June 18, 2001. Two comments were received. The Oregon Department of Transportation was interested in more information about in-ground air stripping technology, and coordination with EPA on the location of wells that will be put on the ODOT property. The Clackamas County Water Environment Services was interested in protecting wetlands within the project area and asked to be notified if any pollution is found near springs, or on the ground surface.

### **Site history**

The NW Pipe and Casing/Hall Process Company Superfund Site is in Clackamas, Oregon. For EPA's investigation, the 53-acre site was divided into two parts, parcel A (21 acres) and parcel B (32 acres). Soil and groundwater on the site are contaminated as a result of past waste handling practices from former pipe manufacturing and coating facilities. Contaminants include spent solvents, primers, coal tar, coating product containers, coal tar residues, and oils. Final decision about how to clean up the soil at this site was made by EPA in June 2000. The first phase of the cleanup will involve removing the most highly contaminated soil for off-site treatment or disposal at the permitted landfill. The second phase will include placing a clean soil cap over the undeveloped part of the site.

#### **Information Resources**

### **EPA's final decision documents**

The final decision, a summary of comments received, and EPA's responses can be found in a document known as the "Record of Decision". You can review the Record of Decision at the following locations:

Clackamas County Library 11750 SE 82<sup>nd</sup> Ave., Suite D Clackamas, Oregon (503) 652-2640 The library is at the northeast corner of the Clackamas Town Center Mall parking lot.

**EPA Oregon Office** 811 SW 6<sup>th</sup> Ave., 3rd Floor Portland, Oregon (503) 326-3250 EPA Records Center 1200 6<sup>th</sup> Ave., 7<sup>th</sup> Floor Seattle, Washington (206) 553-4494

#### Internet information

The Record of Decision, is also available at: http://www/epa.gov/r10earth/, first click on "index", then on "N" for Northwest Pipe and Casing.

Also, the web page was recently updated to include new photos of site work in the photo gallery.

### If you have questions please contact:

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To ensure effective communication with everyone, additional services can be made available to persons with disabilities by contacting any of the numbers listed above.



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